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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/852,613

05/11/2001

Kazunari Matsui

0100/0164

5347

21395

7590

11/04/2004

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EXAMINER

STEVENS, ROBERTA A

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 11/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/852,613

Applicant(s)

MATSUI, KAZUNARI

Examiner

Roberta A Stevens

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12-19-01</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Barton (U.S. 6654431 B1).
3. Regarding claim 1, Barton teaches (fig. 3 and col. 7, line 61 – col. 8, line 41) a method of generating an OFDM signal, comprising: assigning every segment of an input information signal to one of first signal points in a complex plane in response to a state of the segment, and generating first signal-point information representing the assignment of the segment to one of the first signal points (col. 9, line 24 – col. 10, line 64); generating second signal-point information in response to the first signal-point information, wherein the first signal-point information and the second signal-point information are symmetrical with respect to a predetermined frequency having a relation of a predetermined integer ratio with an IDFT sampling frequency to cancel and nullify one of a real-part IDFT-resultant signal and an imaginary-part IDFT-resultant signal (col. 11, line 57 – col. 12, line 54); and implementing IDFT in response to the first signal-point information and the second signal-point information to generate an IDFT-resultant OFDM signal having only one of a real-part component and a imaginary-part component (col. 8, line 42 – col. 9, line 5).

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4. Regarding claim 2, Barton teaches (fig. 3 and col. 7, line 61 – col. 8, line 41) an apparatus for generating an OFDM signal, comprising: first means (320) for assigning every segment of an input information signal to one of first signal points in a complex plane in response to a state of the segment, and generating first signal-point information representing the assignment of the segment to one of the first signal points (col. 9, line 24 – col. 10, line 64); second means (330) for generating second signal-point information in response to the first signal-point information, wherein the first signal-point information and the second signal-point information are symmetrical with respect to a predetermined frequency having a relation of a predetermined integer ratio with an IDFT sampling frequency to cancel and nullify one of a real-part IDFT-resultant signal and an imaginary-part IDFT-resultant signal (col. 11, line 57 – col. 12, line 54); and third means (340) for implementing IDFT in response to the first signal-point information and the second signal-point information to generate an IDFT-resultant OFDM signal having only one of a real-part component and a imaginary-part component (col. 8, line 42 – col. 9, line 5).

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Conclusion

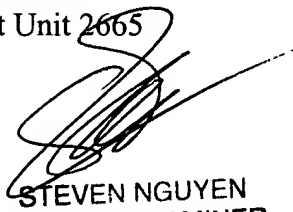
1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roberta A Stevens whose telephone number is 571-272-3161.

The examiner can normally be reached on M-F 9:00am-5:30pm.

2. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

3. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Roberta A Stevens
Examiner
Art Unit 2665



STEVEN NGUYEN
PRIMARY EXAMINER